

## **Improved Foil Structure for Regenerators**

**Abstract:** In a regenerator for a regenerative cycle machine, regenerator foil is grooved on both sides, with intersections of grooves on opposite side forming holes at which separate flows of fluid interact to induce flows ancillary to the overall direction of flow in the regenerator, thereby enhancing heat transfer to and from the material of the regenerator and improving thermodynamic performance of the gas cycle machine.